1. Solve the linear inequality below. Then, choose the constant and interval combination that describes the solution set.

$$-8 - 6x < \frac{-37x + 8}{7} \leq -8 - 9x$$

   A. $(-\infty, a] \cup (b, \infty)$, where $a \in [-14.25, -9.75]$ and $b \in [-3.75, -2.25]$

   B. $[a, b)$, where $a \in [-14.25, -11.25]$ and $b \in [-3.75, 0]$

   C. $(a, b]$, where $a \in [-17.25, -9]$ and $b \in [-6, 1.5]$

   D. $(-\infty, a) \cup [b, \infty)$, where $a \in [-13.5, -12]$ and $b \in [-5.25, -1.5]$

   E. None of the above.

---

2. Using an interval or intervals, describe all the x-values within or including a distance of the given values.

<div align="center">No less than 4 units from the number -5.</div>

   A. $[-9, -1]$

   B. $(-\infty, -9) \cup (-1, \infty)$

   C. $(-\infty, -9] \cup [-1, \infty)$

   D. $(-9, -1)$

   E. None of the above

---

3. Using an interval or intervals, describe all the x-values within or including a distance of the given values.

<div align="center">No more than 9 units from the number -2.</div>

   A. $[-11, 7]$

   B. $(-11, 7)$

   C. $(-\infty, -11] \cup [7, \infty)$

   D. $(-\infty, -11) \cup (7, \infty)$

E. None of the above

4. Solve the linear inequality below. Then, choose the constant and interval combination that describes the solution set.

$$\frac{-4}{6} - \frac{8}{7}x \le \frac{-3}{4}x + \frac{3}{2}$$

A. $[a, \infty)$, where $a \in [0.75, 6]$

B. $(-\infty, a]$, where $a \in [3.75, 8.25]$

C. $[a, \infty)$, where $a \in [-6.75, -3]$

D. $(-\infty, a]$, where $a \in [-6, -3]$

E. None of the above.

5. Solve the linear inequality below. Then, choose the constant and interval combination that describes the solution set.

$$-10x + 3 < 7x - 4$$

A. (a, ∞), where $a \in [-0.62, -0.02]$

B. $(-\infty, a)$, where $a \in [-0.5, 0.2]$

C. (a, ∞), where $a \in [0.03, 1.55]$

D. $(-\infty, a)$, where $a \in [0.2, 0.5]$

E. None of the above.

6. Solve the linear inequality below. Then, choose the constant and interval combination that describes the solution set.

$$-3x - 7 < 3x - 6$$

A. (a, ∞), where $a \in [-0.06, 0.59]$

B. $(-\infty, a)$, where $a \in [-0.34, -0.13]$

   C. $(-\infty, a)$, where $a \in [0.05, 0.9]$

   D. (a, ∞), where $a \in [-0.93, -0.15]$

   E. None of the above.

7. Solve the linear inequality below. Then, choose the constant and interval combination that describes the solution set.

$$9 - 3x > 6x \text{ or } 7 + 6x < 7x$$

   A. $(-\infty, a] \cup [b, \infty)$, where $a \in [-9, -4.5]$ and $b \in [-4.5, 3]$

   B. $(-\infty, a) \cup (b, \infty)$, where $a \in [-8.25, -3]$ and $b \in [-2.25, 2.25]$

   C. $(-\infty, a) \cup (b, \infty)$, where $a \in [-2.25, 2.25]$ and $b \in [1.5, 13.5]$

   D. $(-\infty, a] \cup [b, \infty)$, where $a \in [-2.25, 7.5]$ and $b \in [6, 9]$

   E. $(-\infty, \infty)$

8. Solve the linear inequality below. Then, choose the constant and interval combination that describes the solution set.

$$\frac{10}{8} - \frac{10}{7}x < \frac{-4}{5}x - \frac{10}{9}$$

   A. $(-\infty, a)$, where $a \in [-6.75, -0.75]$

   B. (a, ∞), where $a \in [0.75, 6.75]$

   C. (a, ∞), where $a \in [-8.25, -2.25]$

   D. $(-\infty, a)$, where $a \in [3, 5.25]$

   E. None of the above.

9. Solve the linear inequality below. Then, choose the constant and interval combination that describes the solution set.

$$6 + 7x > 8x \text{ or } 8 + 3x < 4x$$

A. $(-\infty, a] \cup [b, \infty)$, where $a \in [-12, -4.5]$ and $b \in [-8.25, -4.5]$

B. $(-\infty, a) \cup (b, \infty)$, where $a \in [-15.75, -6]$ and $b \in [-9, -4.5]$

C. $(-\infty, a) \cup (b, \infty)$, where $a \in [2.25, 9.75]$ and $b \in [4.5, 11.25]$

D. $(-\infty, a] \cup [b, \infty)$, where $a \in [2.25, 9]$ and $b \in [6.75, 15]$

E. $(-\infty, \infty)$

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10. Solve the linear inequality below. Then, choose the constant and interval combination that describes the solution set.

$$9 - 5x \leq \frac{21x - 8}{6} < 9 + 3x$$

A. $(-\infty, a] \cup (b, \infty)$, where $a \in [-4.5, 0.07]$ and $b \in [-22.5, -17.25]$

B. $(-\infty, a) \cup [b, \infty)$, where $a \in [-4.5, 0]$ and $b \in [-21, -19.5]$

C. $[a, b)$, where $a \in [-4.5, 0.75]$ and $b \in [-23.25, -15]$

D. $(a, b]$, where $a \in [-4.27, 0]$ and $b \in [-24, -15]$

E. None of the above.

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11. Solve the linear inequality below. Then, choose the constant and interval combination that describes the solution set.

$$7 + 6x < \frac{54x + 5}{7} \leq 8 + 7x$$

A. $(a, b]$, where $a \in [0, 8.25]$ and $b \in [7.5, 13.5]$

B. $(-\infty, a) \cup [b, \infty)$, where $a \in [0.75, 7.5]$ and $b \in [9, 14.25]$

C. $[a, b)$, where $a \in [0.75, 6]$ and $b \in [6.75, 13.5]$

D. $(-\infty, a] \cup (b, \infty)$, where $a \in [1.5, 4.5]$ and $b \in [5.25, 12]$

E. None of the above.

---

12. Using an interval or intervals, describe all the x-values within or including a distance of the given values.

No more than 7 units from the number 4.

A. $(-\infty, -3] \cup [11, \infty)$

B. $[-3, 11]$

C. $(-3, 11)$

D. $(-\infty, -3) \cup (11, \infty)$

E. None of the above

13. Using an interval or intervals, describe all the x-values within or including a distance of the given values.

More than 4 units from the number 6.

A. $(2, 10)$

B. $(-\infty, 2) \cup (10, \infty)$

C. $(-\infty, 2] \cup [10, \infty)$

D. $[2, 10]$

E. None of the above

14. Solve the linear inequality below. Then, choose the constant and interval combination that describes the solution set.

$$\frac{5}{6} - \frac{4}{7}x \leq \frac{-3}{3}x - \frac{6}{4}$$

A. $[a, \infty)$, where $a \in [-6, -4.5]$

B. $[a, \infty)$, where $a \in [1.5, 7.5]$

C. $(-\infty, a]$, where $a \in [4.5, 7.5]$

D. $(-\infty, a]$, where $a \in [-6, -3.75]$

E. None of the above.

---

15. Solve the linear inequality below. Then, choose the constant and interval combination that describes the solution set.

$$-10x - 6 \le 3x - 9$$

A. $[a, \infty)$, where $a \in [-0.39, 0.21]$

B. $[a, \infty)$, where $a \in [0.12, 0.79]$

C. $(-\infty, a]$, where $a \in [-0.23, 0.58]$

D. $(-\infty, a]$, where $a \in [-0.41, 0]$

E. None of the above.

---

16. Solve the linear inequality below. Then, choose the constant and interval combination that describes the solution set.

$$-7x - 3 < 3x - 7$$

A. (a, ∞), where $a \in [-0.27, 1.94]$

B. $(-\infty, a)$, where $a \in [0.17, 1.69]$

C. $(-\infty, a)$, where $a \in [-0.41, 0.27]$

D. (a, ∞), where $a \in [-2.08, -0.33]$

E. None of the above.

---

17. Solve the linear inequality below. Then, choose the constant and interval combination that describes the solution set.

$$7 - 3x > 4x \text{ or } 6 + 8x < 11x$$

A. $(-\infty, a) \cup (b, \infty)$, where $a \in [-0.07, 2.85]$ and $b \in [1.5, 2.85]$

B. $(-\infty, a] \cup [b, \infty)$, where $a \in [-0.07, 3.97]$ and $b \in [-0.75, 6]$

C. $(-\infty, a] \cup [b, \infty)$, where $a \in [-4.2, 0.38]$ and $b \in [-3, -0.75]$

D. $(-\infty, a) \cup (b, \infty)$, where $a \in [-2.02, -1.12]$ and $b \in [-1.35, 1.05]$

E. $(-\infty, \infty)$

---

18. Solve the linear inequality below. Then, choose the constant and interval combination that describes the solution set.

$$\frac{6}{7} + \frac{4}{5}x > \frac{7}{6}x - \frac{8}{9}$$

A. $(-\infty, a)$, where $a \in [4.5, 9.75]$

B. (a, ∞), where $a \in [-6.75, -3.75]$

C. $(-\infty, a)$, where $a \in [-6, -0.75]$

D. (a, ∞), where $a \in [0.75, 9]$

E. None of the above.

---

19. Solve the linear inequality below. Then, choose the constant and interval combination that describes the solution set.

$$8 + 4x > 7x \text{ or } 9 + 4x < 6x$$

A. $(-\infty, a] \cup [b, \infty)$, where $a \in [-1.5, 3]$ and $b \in [1.5, 6]$

B. $(-\infty, a) \cup (b, \infty)$, where $a \in [-12, -3]$ and $b \in [-4.5, 3.75]$

C. $(-\infty, a] \cup [b, \infty)$, where $a \in [-6, -3.75]$ and $b \in [-3, 0]$

D. $(-\infty, a) \cup (b, \infty)$, where $a \in [-3, 5.25]$ and $b \in [3, 6]$

E. $(-\infty, \infty)$

---

20. Solve the linear inequality below. Then, choose the constant and interval combination that describes the solution set.

$$6 + 5x \le \frac{42x + 4}{5} < 9 + 8x$$

A. $(-\infty, a) \cup [b, \infty)$, where $a \in [-6, 0.75]$ and $b \in [-26.25, -16.5]$

B. $[a, b)$, where $a \in [-8.25, 0]$ and $b \in [-22.5, -18.75]$

C. $(-\infty, a] \cup (b, \infty)$, where $a \in [-3.75, -0.75]$ and $b \in [-25.5, -13.5]$

D. $(a, b]$, where $a \in [-2.62, -1.2]$ and $b \in [-27, -12]$

E. None of the above.

---

21. Solve the linear inequality below. Then, choose the constant and interval combination that describes the solution set.

$$5 + 3x \leq \frac{15x + 9}{3} < 8 + 4x$$

A. $[a, b)$, where $a \in [-9, -0.75]$ and $b \in [-7.5, -1.5]$

B. $(-\infty, a] \cup (b, \infty)$, where $a \in [-2.55, -0.45]$ and $b \in [-5.25, -4.5]$

C. $(a, b]$, where $a \in [-2.48, -0.22]$ and $b \in [-8.25, -2.25]$

D. $(-\infty, a) \cup [b, \infty)$, where $a \in [-2.25, -0.07]$ and $b \in [-6, -2.25]$

E. None of the above.

---

22. Using an interval or intervals, describe all the x-values within or including a distance of the given values.

No more than 5 units from the number 4.

A. $(-1, 9)$

B. $[-1, 9]$

C. $(-\infty, -1] \cup [9, \infty)$

D. $(-\infty, -1) \cup (9, \infty)$

E. None of the above

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23. Using an interval or intervals, describe all the x-values within or including a distance of the given values.

No more than 5 units from the number 7.

A. $[2, 12]$

B. $(2, 12)$

C. $(-\infty, 2) \cup (12, \infty)$

D. $(-\infty, 2] \cup [12, \infty)$

E. None of the above

---

24. Solve the linear inequality below. Then, choose the constant and interval combination that describes the solution set.

$$\frac{9}{4} - \frac{10}{8}x < \frac{-6}{9}x + \frac{7}{2}$$

A. $(-\infty, a)$, where $a \in [-3.75, 1.5]$

B. (a, ∞), where $a \in [0.75, 3.75]$

C. (a, ∞), where $a \in [-7.5, -0.75]$

D. $(-\infty, a)$, where $a \in [0, 3]$

E. None of the above.

---

25. Solve the linear inequality below. Then, choose the constant and interval combination that describes the solution set.

$$-7x + 5 < 3x - 3$$

A. $(-\infty, a)$, where $a \in [0.8, 7.8]$

B. $(-\infty, a)$, where $a \in [-1.8, 0.2]$

C. (a, ∞), where $a \in [-0.33, 1.28]$

D. (a, ∞), where $a \in [-2.07, -0.39]$

E. None of the above.

26. Solve the linear inequality below. Then, choose the constant and interval combination that describes the solution set.

$$7x - 5 \geq 9x + 6$$

    A. $(-\infty, a]$, where $a \in [-6.5, -4.5]$

    B. $(-\infty, a]$, where $a \in [3.5, 9.5]$

    C. $[a, \infty)$, where $a \in [-5.5, 0.5]$

    D. $[a, \infty)$, where $a \in [0.5, 6.5]$

    E. None of the above.

27. Solve the linear inequality below. Then, choose the constant and interval combination that describes the solution set.

$$-9 + 6x > 9x \text{ or } 9 + 6x < 7x$$

    A. $(-\infty, a] \cup [b, \infty)$, where $a \in [-7.5, -1.5]$ and $b \in [4.5, 9.75]$

    B. $(-\infty, a] \cup [b, \infty)$, where $a \in [-9.75, -3.75]$ and $b \in [2.25, 5.25]$

    C. $(-\infty, a) \cup (b, \infty)$, where $a \in [-3.75, 5.25]$ and $b \in [6.75, 12]$

    D. $(-\infty, a) \cup (b, \infty)$, where $a \in [-10.5, -7.5]$ and $b \in [0, 6]$

    E. $(-\infty, \infty)$

28. Solve the linear inequality below. Then, choose the constant and interval combination that describes the solution set.

$$\frac{4}{6} - \frac{8}{4}x \leq \frac{-3}{7}x - \frac{7}{3}$$

    A. $[a, \infty)$, where $a \in [0.75, 3.75]$

    B. $[a, \infty)$, where $a \in [-3.75, 0.75]$

    C. $(-\infty, a]$, where $a \in [-4.5, 0]$

    D. $(-\infty, a]$, where $a \in [-0.75, 3.75]$

    E. None of the above.

---

29. Solve the linear inequality below. Then, choose the constant and interval combination that describes the solution set.

$$8 - 3x > 5x \text{ or } 9 + 3x < 6x$$

    A. $(-\infty, a) \cup (b, \infty)$, where $a \in [-5.25, -0.75]$ and $b \in [-3, 0.75]$

    B. $(-\infty, a) \cup (b, \infty)$, where $a \in [-2.25, 3]$ and $b \in [0.75, 4.5]$

    C. $(-\infty, a] \cup [b, \infty)$, where $a \in [-4.5, 0.75]$ and $b \in [-3, 2.25]$

    D. $(-\infty, a] \cup [b, \infty)$, where $a \in [0, 5.25]$ and $b \in [2.25, 8.25]$

    E. $(-\infty, \infty)$

---

30. Solve the linear inequality below. Then, choose the constant and interval combination that describes the solution set.

$$7 + 3x < \frac{29x + 7}{9} \leq 9 + 3x$$

    A. $[a, b)$, where $a \in [26.25, 31.5]$ and $b \in [35.25, 37.5]$

    B. $(-\infty, a) \cup [b, \infty)$, where $a \in [27.75, 33.75]$ and $b \in [34.5, 38.25]$

    C. $(-\infty, a] \cup (b, \infty)$, where $a \in [27, 29.25]$ and $b \in [36.75, 38.25]$

    D. $(a, b]$, where $a \in [27, 33]$ and $b \in [36.75, 37.5]$

    E. None of the above.